

CLAIMS

1. A multiaxial connection osteosynthesis system, in particular for the spine, including a bone anchor member (2) having a head (12), a connecting member (4), a connector (6; 106; 206) having a first deformable housing (46; 146; 246) adapted to receive the head and a second housing (32) adapted to receive the connecting member, the system including clamping means (8) for clamping the connecting member in the second housing, characterized in that the connector is arranged so that, when the clamping means load the connecting member in the second housing, the connecting member loads the connectors directly to deform the first housing and immobilize the head therein.

2. A system according to claim 1 characterized in that the first housing includes a chamber (54) with a concave surface.

3. A system according to claim 1 or claim 2 characterized in that the first housing includes a cavity (110; 210) adapted to receive part of the head (12).

4. A system according to any of claims 1 to 3 characterized in that the head has a spherical part (18).

5. A system according to any of claims 1 to 4 characterized in that the connector includes a slot (56; 256) in the first housing.

6. A system according to any of claims 1 to 5 characterized in that the first housing has a U-shaped opening having an axis (42) and two branches (34) at a distance from and facing each other.

7. A system according to claims 5 and 6 characterized in that the slot is perpendicular to the axis (42) of the U-shaped opening.

8. A system according to claim 6 or claim 7 characterized in that the clamping means include a locking member (8) adapted to engage between the branches of the

U-shaped opening.

9. A system according to any of claims 6 to 8 characterized in that the clamping means include a flange adapted to fit around the branches of the U-shaped opening.

5 10. A system according to any of claims 6 to 9
characterized in that the branches (34) of the U-shaped
opening have a screwthread (28).

11. A system according to claim 10 characterized in that the screwthread (26, 28) has a face (80) substantially perpendicular to the axis of the thread and oriented in a penetration direction of the clamping means on the connector.